For the first treatment the dosage is judged on the experience of one of us as an anaesthetist and is suitably modified for the later fits. The range has been 60–80 mg. flaxedil mixed in a syringe with 250–500 mg. thiopentone and 1/100 gr. (0.65 mg.) atropine sulphate. The patient lies in bed with his head on one pillow. One nurse gives all the assistance needed and remains with the patient until he recovers. No restraint or special padding is needed. The injection is given and as consciousness is lost the apparatus is carried into the room. The lungs are gently inflated once or twice with oxygen from a face-mask and bag, and after about two minutes the shock is given. The stages of the convulsion are recognizable, the clonic stage varying from a slight twitching to a definite convulsion in which, however, the muscles offer no resistance to passive movement. The chin is supported throughout, and on the slightest sign of cyanosis the lungs are, even during the fit, again inflated. Cyanosis is rare, owing to the initially high alveolar oxygen. On cessation of movement the lungs are again inflated and the patient turned on his side. This obviates any need of an artificial airway and prevents inhalation of the saliva that is often produced. The duration of apnoea after the fit is oddly constant for each individual in all his treatments and occurs even if the shock is delayed until reasonable respiration has returned after the injection. If there appears to be any risk of the patient waking when partially paralysed we give 1.25 mg. neostigmine intravenously. All our patients have woken quietly, as if from a natural sleep, within twenty minutes. One elderly woman failed to convulse after either modified or unmodified shock.

After this admittedly short series we feel that it is becoming clear that the method has the following advantages: (1) Feeble muscular action, causing neither local damage nor systemic strain. (2) Absence of glottic spasm and prolonged respiratory depression, making the avoidance of anoxia simple. (3) Full psychiatric effect of the treatment enhanced by the fact that the patient, often anxious and depressed, sees no apparatus but a syringe, feels nothing worse than a thiopentone induction, and awakes quietly and orientated. The increasing confidence of most patients contrasts markedly with the sometimes increasing fear of unmodified electroplexy as the course proceeds.

We believe the method to be effective, safe, and speedy. It should not be undertaken without apparatus for pulmonary inflation nor without the immediate availability of instruments for intubation and resuscitation and the presence of someone skilled in their use. Whenever a patient is rendered unconscious and apnoeic, accidents can happen. The contraindications are those of barbiturate anaesthesia and the curarizing drugs.

The observations of Drs. Smith and Thomas on the effects of flaxedil on conscious patients are of importance as an investigation, but we feel most strongly that no patient should ever be subjected to curarization when conscious. We have recently heard from a reliable source of patients fearing surgical operation because of true stories of the awful feeling of "waking death" following the anaesthetist's injection. To subject psychiatric patients to such an ordeal cannot be helpful. The raised blood pressure and respiratory rate found by these investigators might surely be due to anoxia as well as to fear. Thiopentone would be expected to lower the blood pressure and slow respiration without, however, relieving the anoxia.

Some queries may be added on the psychology of E.C.T. If, in contrast to insulin, cardiazol, or unmodified E.C.T., patients can be made unaware of the whole procedure (one of our patients thought that there was nothing happening but the injection), how does this affect the psychological interpretation of the convulsive reaction as the experience of, and unconscious need for, punishment against guilt-feeling? If, as seems agreed, results of modified E.C.T. are at least as good as unmodified treatment, are we still right in interpreting after-shock aggressiveness in unmodified treatments as abreactive? Or can the absence of post-convulsive excitement, even after the effect of thiopentone and relaxant has worn off, be co-ordinated with the quicker return to normal of the electroencephalogram after shock under an anaesthetic?—We are, etc.,

W. M. JONES.
H. B. ROSENBUSCH.

Harrogate.

Diet in Diabetes

SIR,—The paper of Drs. C. C. Forsyth, T. W. G. Kinnear, and Professor D. M. Dunlop (May 19, p. 1095) is of great importance in drawing attention to the necessity to provide the diabetic, and particularly the diabetic child and the pregnant woman, with a diet adequate to maintain proper nutrition. That this can be effected by "free" diet is not, however, by any means established. Such a diet had to be abandoned in 11 of their 50 cases, and "the fact that failures are still appearing after five years' treatment is disquieting." On the other hand the condition of patients on their controlled diet was generally less satisfactory as judged by body weight. But surely the controlled diet contained far too little carbohydrate. Presumably their cases were of similar type to those studied on a "free" diet, who were non-obese diabetics, males preponderating in the ratio of 2 to 1, and whose occupation ranged "from sedentary work to heavy labouring." Yet 30 of their 39 patients received only 150–200 g. carbohydrate, and seven even less.

One would agree with their conclusion that diabetics who have never been overweight may be given a full diet without much danger of becoming obese, but in some cases a tendency to exceed the desirable weight must be checked by dietary restriction. For several years it has been my practice to commence treatment of the non-obese patient with a measured intake of carbohydrate, 200–250 g. for a woman, 250–300 g. for a man, allowing free choice of protein and fat. Glycosuria is controlled with insulin, and the adequacy of the diet judged by the patient's appetite and the weight. The dietary carbohydrate is adjusted so that the patient is satisfied and the diet approximates closely to that of other members of his household, but few desire more than 300 g. Insulin dosage is altered as found necessary. Thus the patient is very soon taking a diet virtually of his own choice, glycosuria being generally controlled with one injection, usually a mixture of soluble and P.Z. insulin. With this regime he is less liable to insulin reactions, and is also able to make adjustments in the amount of insulin when upset by intercurrent illness. He is told what is his "ideal" weight, and instructed that this must never be exceeded. This method is simple and generally ensures the full co-operation of the patient, and appears to me preferable to the "free" diet. It is of interest to note that the great majority of the patients of Drs. Forsyth, Kinnear, and Professor Dunlop on "free" diet were found to consume between 200 and 350 g. carbohydrate, just the amount in the controlled diets of my patients.

In conclusion I would like to refer to the term "correct" weight. Published tables of average weights are satisfactory for men and the younger female age groups, but the "average" weights given for women of middle age or more are undoubtedly above the "desirable," probably by about 10%. It is noted that two women in the authors' series had formerly been overweight, and that "free" diet had to be abandoned as they again became obese. This is surely what might have been anticipated. With a history of obesity, dietary restriction is probably always necessary, and generally this is effective without resort to insulin.—I am, etc.,

IAN MURRAY.

Glasgow.

Polymastia and Breast-feeding

SIR,—I have read with interest the case of "Polymastia Observed in Pregnancy," reported by Dr. F. Hamilton Leckie (May 12, p. 1060). Dr. Leckie remarks that in a case of this nature breast-feeding is probably contraindicated, since he argues that the flow of milk from the supernumerary breasts would probably continue even though the extramammary glands were not suckled. This may be a fallacious conclusion, as in the case reported the supernumerary nipples were suckled. One other case which I have seen lends support to this view.

A primigravida was observed to have islands of additional breast tissue, with a rudimentary nipple in the region of the right

axilla. She was delivered normally at term, following which lactation became established, and milk was seen to drip freely from the additional nipple during breast-feeding. No attempt was made, however, to put the child to this nipple, and after the first five or six days of the puerperium the flow of milk from it became markedly decreased, and disappeared entirely by the twelfth day, when the patient was discharged from hospital. The supply of milk from the normal breasts continued unchanged.

It is possible, therefore, that the attempt to feed from the additional nipples in the case reported by Dr. Leckie was responsible for continuation of the milk supply, which might have dried up had suckling from them not been attempted. —I am, etc.,

Manchester. C. J. DEWHURST.

Insomnia after Tuberculous Meningitis and Streptomycin

SIR,—In answer to Dr. Charles Weston's letter (May 12, p. 1081), we have not in our series of cases noted insomnia as an after-effect of tuberculous meningitis treated with streptomycin. During the course of treatment sleep abnormalities have been noted, including complete reversal of sleep rhythm, but these have, in our experience, all resolved with recovery. We have noted as an after-effect in treated cases disturbances which are presumably due to lesions of the hypothalamus or its neighbourhood, such as obesity and glycosuria, and there seems to be no reason why insomnia should not also occur, as in Dr. Weston's case. It is a recognized sequel of other neurological disorders involving this region. One would have thought that there was no objection to barbital therapy, but some of these cases learn to lead lives consistent with their new sleep pattern.—We are, etc.,

W. L. CALNAN.
J. RUBIE.
London, S.W.3. A. F. MOHUN.

Oral Streptomycin for Dysentery

SIR,—For some months now, with the co-operation of the physicians, at the Peace Memorial Hospital we have been using streptomycin orally for the treatment of Sonne dysentery, in which in quite a large percentage of cases courses of sulphonamide drugs have proved ineffective. The dosage usually employed is 0.5 g. twice daily for four days. Stools are tested 48 hours after cessation of treatment, and again at periods up to one month, and have remained negative for *Shigella sonnei*. Clinical response was equally rapid, with no subsequent remission, in the 20 cases tested so far. There have been no toxic manifestations, as would be expected, since the drug is not absorbed from the gut. All strains were tested for sensitivity prior to treatment, and to date we have not isolated a resistant strain.

An argument has been put to us that, should a patient have a quiescent or undiagnosed tuberculous lesion, streptomycin-resistant strains of tubercle bacilli might develop from this treatment. As the drug is not absorbed in the gut we think this criticism is without foundation.

We have not found any record in the literature of oral streptomycin trials in this country, but Ross *et al.* (*J. Amer. med. Ass.*, 1949, **141**, 183) report satisfactory results in the treatment of Shigella enteritis with oral streptomycin.—I am, etc.,

Watford. B. A. THOMPSON.

Chloramphenicol in Persistent Dysentery

SIR,—The recent memorandum by Drs. D. A. Sime and D. Cameron (May 5, p. 997) confirms the experience gained in a children's hospital and a children's ward of a general hospital during an outbreak of Sonne dysentery. Forty-six out of 48 cases were treated first with one of the generally used sulphonamides. Those patients who became clinically symptomless, but whose stools remained positive, were sent home or transferred to an isolation hospital. This, however, was impracticable in seven cases, all of which were subsequently treated with chloramphenicol. Three of them died of the illness for which they were admitted originally. The remaining four became negative, three after one course of 100 mg./kg. body weight daily in divided doses for four days, and one after two courses. All of them showed three or four consecutive negative specimens taken at intervals from five to seven days. The two cases not treated with sulphonamides became and remained negative after one course of chloramphenicol.—I am, etc.,

Brighton. W. MESTITZ.

Treatment of Orf

SIR,—Dr. G. M. Lloyd (May 19, p. 1144) writes, "The condition resolves itself in five to eight weeks, as reported. Treatment with the earlier antibiotics has been unsatisfactory." Perhaps it may be of some help in other cases to report that during the last few months I have treated three cases of orf with ung. hydrarg. ammon. dil. In each case after three days of this treatment there were no further signs of activity and the exhibition of a bland ointment resulted in a healed lesion at the end of another seven to ten days. —I am, etc.,

Cheriton Bishop, near Exeter. F. E. GRAHAM-BONNALIE.

Atropine and Whooping-cough

SIR,—I was very interested to read Dr. E. M. Singer's letter (May 19, p. 1145), in which she mentions a case of atropine poisoning following 10 ml. of atropine methonitrate and recommends that for home use an aqueous solution be prescribed. Apart from an unsuccessful attempt at suicide, by an adult, this seems to be the first recorded case of poisoning, and, as Dr. Singer says, atropine methonitrate has become increasingly popular of recent months as symptomatic treatment for whooping-cough. The use of an aqueous solution presents some difficulties, because a 0.6% solution (or a 1:10,000 solution, commonly employed in treating infantile pyloric stenosis) will not keep satisfactorily for more than a few days, and repeat prescriptions would place an added burden on the pharmacist. Moreover, accurate dosage with the last-mentioned dilution, in terms of portions of a teaspoonful, is not possible. It seems far more likely, too, that a good portion of an alcoholic solution would be spat out by a child because of its very unpleasant taste, whereas an aqueous one is practically tasteless. The answer seems to be, as always, that drugs in any form should be kept out of the child's reach.—I am, etc.,

London, W.C.2. J. R. COX.

Child Health Visiting

SIR,—Professor A. G. Watkins's report (May 12, p. 1075) on the work of health visiting in a children's department is of great interest, as I have had what I think is probably the unique experience of having worked for two years in a university neonatal department to which a health visitor was attached, and then became responsible for similar cases in a general practice to which again a health visitor was attached.

This idea of elaborating and perfecting home visiting from a hospital in the case of children passes by the very foundadation of any principle of paediatric treatment—namely, that, ideally, children should never reach hospital but be treated in the home and nursed, if humanly possible, by the mother. When I first qualified and became a house-physician in a university children's department this was one of the lessons continually instilled into me by a chief whose teaching has been my inspiration ever since. During my succeeding six years in paediatrics it has become more and more obvious that children recover more quickly and are far happier at home. The more enthusiasm and conviction about this, the easier it is to find ways and means to avoid admission to hospital. It is now perfectly obvious to me that less than a quarter of present admissions to children's wards are really necessary. Thus the whole idea of home care by health visitors from a hospital following hospital